## SEQUENCE LISTING

| <110> PATEL, AMANDA J.  HONORE, ERIC  LESAGE, FLORIAN  ROMEY, GEORGES  LAZDUSKI, MICHEL  |     |  |  |  |  |  |  |  |  |  |  |  |  |
|--|-----|--|--|--|--|--|--|--|--|--|--|--|--|
| <120> A method for the identification of anesthetics   |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <130> f17b12prov3-humanTREK  |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <140> 6079727<br><141> 1999-02-12  |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <160> 4  |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <170> Wordperfect 8.0  |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <210> 1<br><211> 1236<br><212> ADN<br><213> Homo sapiens   |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <220> <221> CDS <222> (1)(1236)  |     |  |  |  |  |  |  |  |  |  |  |  |  |
| <pre>&lt;400&gt; 1 atg gcg gcc cct gac ttg ctg gat cct aaa tct gcc gct cag aac tcc 4 Met Ala Ala Pro Asp Leu Leu Asp Pro Lys Ser Ala Ala Gln Asn Ser</pre> | 18  |  |  |  |  |  |  |  |  |  |  |  |  |
| aaa ccg agg ctc tcg ttt tcc acg aaa ccc aca gtg ctt gct tcc cgg Lys Pro Arg Leu Ser Phe Ser Thr Lys Pro Thr Val Leu Ala Ser Arg 20 25 30                   | 96  |  |  |  |  |  |  |  |  |  |  |  |  |
| gtg gag agt gac acg acc att aat gtt atg aaa tgg aag acg gtc tcc l<br>Val Glu Ser Asp Thr Thr Ile Asn Val Met Lys Trp Lys Thr Val Ser<br>35 40 45           | 144 |  |  |  |  |  |  |  |  |  |  |  |  |
| acg ata ttc ctg gtg gtt gtc ctc tat ctg atc atc gga gcc acc gtg 1 Thr Ile Phe Leu Val Val Val Leu Tyr Leu Ile Ile Gly Ala Thr Val 50 55 60                 | 192 |  |  |  |  |  |  |  |  |  |  |  |  |
| ttc aaa gca ttg gag cag cct cat gag att tca cag agg acc acc att Phe Lys Ala Leu Glu Gln Pro His Glu Ile Ser Gln Arg Thr Thr Ile 65 70 75 80                | 240 |  |  |  |  |  |  |  |  |  |  |  |  |
| gtg atc cag aag caa aca ttc ata tcc caa cat tcc tgt gtc aat tcg 2 Val Ile Gln Lys Gln Thr Phe Ile Ser Gln His Ser Cys Val Asn Ser 85 90 95                 | 288 |  |  |  |  |  |  |  |  |  |  |  |  |
| acg gag ctg gat gaa ctc att cag caa ata gtg gca gca ata aat gca Thr Glu Leu Asp Glu Leu Ile Gln Gln Ile Val Ala Ala Ile Asn Ala 100 105 110                | 336 |  |  |  |  |  |  |  |  |  |  |  |  |
| ggg att ata ccg tta gga aac acc tcc aat caa atc agt cac tgg gat Gly Ile Ile Pro Leu Gly Asn Thr Ser Asn Gln Ile Ser His Trp Asp 115 120 125                | 384 |  |  |  |  |  |  |  |  |  |  |  |  |
| ttg gga agt tcc ttc ttc ttt gct ggc act gtt att aca acc ata gga Leu Gly Ser Ser Phe Phe Phe Ala Gly Thr Val Ile Thr Thr Ile Gly 130 135 140                | 432 |  |  |  |  |  |  |  |  |  |  |  |  |

|                   | gga               |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   | 480  |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
| Phe<br>145        | Gly               | Asn               | Ile               | Ser               | Pro<br>150        | Arg               | Thr               | Glu               | Gly               | Gly<br>155        | Lys               | Ile               | Phe               | Cys               | 11e<br>160        |      |
| atc<br>Ile        | tat<br>Tyr        | gcc<br>Ala        | tta<br>Leu        | ctg<br>Leu<br>165 | gga<br>Gly        | att<br>Ile        | ccc<br>Pro        | ctc<br>Leu        | ttt<br>Phe<br>170 | ggt<br>Gly        | ttt<br>Phe        | ctc<br>Leu        | ttg<br>Leu        | gct<br>Ala<br>175 | gga<br>Gly        | 528  |
| gtt<br>Val        | gga<br>Gly        | gat<br>Asp        | cag<br>Gln<br>180 | cta<br>Leu        | ggc<br>Gly        | acc<br>Thr        | ata<br>Ile        | ttt<br>Phe<br>185 | gga<br>Gly        | aaa<br>Lys        | gga<br>Gly        | att<br>Ile        | gcc<br>Ala<br>190 | aaa<br>Lys        | gtg<br>Val        | 576  |
| gaa<br>Glu        | gat<br>Asp        | acg<br>Thr<br>195 | ttt<br>Phe        | att<br>Ile        | aag<br>Lys        | tgg<br>Trp        | aat<br>Asn<br>200 | gtt<br>Val        | agt<br>Ser        | cag<br>Gln        | acc<br>Thr        | aag<br>Lys<br>205 | att<br>Ile        | cgc<br>Arg        | atc<br>Ile        | 624  |
| atc<br>Ile        | tca<br>Ser<br>210 | aca<br>Thr        | atc<br>Ile        | ata<br>Ile        | ttt<br>Phe        | ata<br>Ile<br>215 | cta<br>Leu        | ttt<br>Phe        | ggc<br>Gly        | tgt<br>Cys        | gta<br>Val<br>220 | ctc<br>Leu        | ttt<br>Phe        | gtg<br>Val        | gct<br>Ala        | 672  |
| ctg<br>Leu<br>225 | cct<br>Pro        | gcg<br>Ala        | atc<br>Ile        | ata<br>Ile        | ttc<br>Phe<br>230 | aaa<br>Lys        | cac<br>His        | ata<br>Ile        | gaa<br>Glu        | ggc<br>Gly<br>235 | tgg<br>Trp        | agt<br>Ser        | gcc<br>Ala        | ctg<br>Leu        | gac<br>Asp<br>240 | 720  |
| gcc<br>Ala        | att<br>Ile        | tat<br>Tyr        | ttt<br>Phe        | gtg<br>Val<br>245 | gtt<br>Val        | atc<br>Ile        | act<br>Thr        | cta<br>Leu        | aca<br>Thr<br>250 | act<br>Thr        | att<br>Ile        | gga<br>Gly        | ttt<br>Phe        | ggt<br>Gly<br>255 | gac<br>Asp        | 768  |
| tac<br>Tyr        | gtt<br>Val        | gca<br>Ala        | ggt<br>Gly<br>260 | gga<br>Gly        | tcc<br>Ser        | gat<br>Asp        | att<br>Ile        | gaa<br>Glu<br>265 | tat<br>Tyr        | ctg<br>Leu        | gac<br>Asp        | ttc<br>Phe        | tat<br>Tyr<br>270 | aag<br>Lys        | cct<br>Pro        | 816  |
| gtc<br>Val        | gtg<br>Val        | tgg<br>Trp<br>275 | ttc<br>Phe        | tgg<br>Trp        | atc<br>Ile        | ctt<br>Leu        | gta<br>Val<br>280 | Gly<br>aaa        | ctt<br>Leu        | gct<br>Ala        | tac<br>Tyr        | ttt<br>Phe<br>285 | gct<br>Ala        | gct<br>Ala        | gtc<br>Val        | 864  |
| ctg<br>Leu        | agc<br>Ser<br>290 | atg<br>Met        | att<br>Ile        | gga<br>Gly        | gat<br>Asp        | tgg<br>Trp<br>295 | ctc<br>Leu        | cga<br>Arg        | gtg<br>Val        | ata<br>Ile        | tct<br>Ser<br>300 | aaa<br>Lys        | aag<br>Lys        | aca<br>Thr        | aaa<br>Lys        | 912  |
| gaa<br>Glu<br>305 | gag<br>Glu        | gtg<br>Val        | gga<br>Gly        | gag<br>Glu        | ttc<br>Phe<br>310 | aga<br>Arg        | gca<br>Ala        | cac<br>His        | gct<br>Ala        | gct<br>Ala<br>315 | gag<br>Glu        | tgg<br>Trp        | aca<br>Thr        | gcc<br>Ala        | aac<br>Asn<br>320 | 960  |
| gtc<br>Val        | aca<br>Thr        | gcc<br>Ala        | gaa<br>Glu        | ttc<br>Phe<br>325 | aaa<br>Lys        | gaa<br>Glu        | acc<br>Thr        | agg<br>Arg        | agg<br>Arg<br>330 | cga<br>Arg        | ctg<br>Leu        | agt<br>Ser        | gtg<br>Val        | gag<br>Glu<br>335 | att<br>Ile        | 1008 |
| tat<br>Tyr        | gac<br>Asp        | aag<br>Lys        | ttc<br>Phe<br>340 | cag<br>Gln        | cgg<br>Arg        | gcc<br>Ala        | acc<br>Thr        | tcc<br>Ser<br>345 | atc<br>Ile        | aag<br>Lys        | cgg<br>Arg        | aag<br>Lys        | ctc<br>Leu<br>350 | tcg<br>Ser        | gca<br>Ala        | 1056 |
| gaa<br>Glu        | ctg<br>Leu        | gct<br>Ala<br>355 | gga<br>Gly        | aac<br>Asn        | cac<br>His        | aat<br>Asn        | cag<br>Gln<br>360 | gag<br>Glu        | ctg<br>Leu        | act<br>Thr        | cct<br>Pro        | tgt<br>Cys<br>365 | agg<br>Arg        | agg<br>Arg        | acc<br>Thr        | 1104 |
| ctg<br>Leu        | tca<br>Ser<br>370 | gtg<br>Val        | aac<br>Asn        | cac<br>His        | ctg<br>Leu        | acc<br>Thr<br>375 | aac<br>Asn        | gag<br>Glu        | agg<br>Arg        | gat<br>Asp        | gtc<br>Val<br>380 | ttg<br>Leu        | cct<br>Pro        | ccc<br>Pro        | tta<br>Leu        | 1152 |
| ctg<br>Leu<br>385 | aag<br>Lys        | act<br>Thr        | gag<br>Glu        | agt<br>Ser        | atc<br>Ile<br>390 | tat<br>Tyr        | ctg<br>Leu        | aat<br>Asn        | ggt<br>Gly        | ttg<br>Leu<br>395 | acg<br>Thr        | cca<br>Pro        | cac<br>His        | tgt<br>Cys        | gct<br>Ala<br>400 | 1200 |

<210> 2 <211> 411 <212> PRT <213> Homo sapiens <400> 2 Met Ala Ala Pro Asp Leu Leu Asp Pro Lys Ser Ala Ala Gln Asn Ser Lys Pro Arg Leu Ser Phe Ser Thr Lys Pro Thr Val Leu Ala Ser Arg 25 20 Val Glu Ser Asp Thr Thr Ile Asn Val Met Lys Trp Lys Thr Val Ser 40 Thr Ile Phe Leu Val Val Val Leu Tyr Leu Ile Ile Gly Ala Thr Val 55 Phe Lys Ala Leu Glu Gln Pro His Glu Ile Ser Gln Arg Thr Thr Ile 75 Val Ile Gln Lys Gln Thr Phe Ile Ser Gln His Ser Cys Val Asn Ser 90 85 Thr Glu Leu Asp Glu Leu Ile Gln Gln Ile Val Ala Ala Ile Asn Ala 105 100 Gly Ile Ile Pro Leu Gly Asn Thr Ser Asn Gln Ile Ser His Trp Asp 120 Leu Gly Ser Ser Phe Phe Phe Ala Gly Thr Val Ile Thr Thr Ile Gly 140 135 Phe Gly Asn Ile Ser Pro Arg Thr Glu Gly Gly Lys Ile Phe Cys Ile 150 155 Ile Tyr Ala Leu Leu Gly Ile Pro Leu Phe Gly Phe Leu Leu Ala Gly 170 Val Gly Asp Gln Leu Gly Thr Ile Phe Gly Lys Gly Ile Ala Lys Val 180 185 Glu Asp Thr Phe Ile Lys Trp Asn Val Ser Gln Thr Lys Ile Arg Ile 205 200 Ile Ser Thr Ile Ile Phe Ile Leu Phe Gly Cys Val Leu Phe Val Ala 220 215 Leu Pro Ala Ile Ile Phe Lys His Ile Glu Gly Trp Ser Ala Leu Asp 235 230 Ala Ile Tyr Phe Val Val Ile Thr Leu Thr Thr Ile Gly Phe Gly Asp 250 245 Tyr Val Ala Gly Gly Ser Asp Ile Glu Tyr Leu Asp Phe Tyr Lys Pro 265 260 Val Val Trp Phe Trp Ile Leu Val Gly Leu Ala Tyr Phe Ala Ala Val 285 280 Leu Ser Met Ile Gly Asp Trp Leu Arg Val Ile Ser Lys Lys Thr Lys 295 300 Glu Glu Val Gly Glu Phe Arg Ala His Ala Ala Glu Trp Thr Ala Asn 315 310 Val Thr Ala Glu Phe Lys Glu Thr Arg Arg Arg Leu Ser Val Glu Ile 330 Tyr Asp Lys Phe Gln Arg Ala Thr Ser Ile Lys Arg Lys Leu Ser Ala 345 340 Glu Leu Ala Gly Asn His Asn Gln Glu Leu Thr Pro Cys Arg Arg Thr 360 Leu Ser Val Asn His Leu Thr Asn Glu Arg Asp Val Leu Pro Pro Leu 380 375 Leu Lys Thr Glu Ser Ile Tyr Leu Asn Gly Leu Thr Pro His Cys Ala 390 Gly Glu Glu Ile Ala Val Ile Glu Asn Ile Lys

<210> 3 <211> 3580 <212> ADN <213> Mus musculus <220> <221> CDS <222> (484)..(1719) <400> 3 agagcggcga ggcgagggga gagtggtgct acgggccagg cgggccaccc cgggccacac 60 ccccaccttg cgggcgcccg gcggggctcg agccaggcgg ggcgcctcac aaagacatgc 120 gaagagggc tgcagtgatc accecetege tgageceegg ggcagageee ageegeegge 180 cgagcgcacg gagccacggg ccgagcgcac ccagggcccg cgcgggaccc caggcggcca 240 cgcaatcggg gtgacccatc gcgcgcgggg gcgtcgtcgt ccgatcccaa cttggcctcg 300 gcctcgccct ctgcccagcc tgccaccgct ggtgtcctct ccttccggcg atttcgtttc 360 ttctcacgct ccccctcta tacccctccc gcctccagcc ccgctctccc caccttgtaa 420 aacaaagccg gggaaaatgc ctacccgtgc agctcggagc gcgcagcccg tcttggaata 480 agg atg gcg gcc cct gac ttg ctg gat ccc aag tct gct gct cag aac Met Ala Ala Pro Asp Leu Leu Asp Pro Lys Ser Ala Ala Gln Asn tcc aaa ccg agg ctc tca ttc tcc tca aaa ccc acc gtg ctt gct tcc 576 Ser Lys Pro Arg Leu Ser Phe Ser Ser Lys Pro Thr Val Leu Ala Ser 20 cgg gtg gag agt gac tcg gcc att aat gtt atg aaa tgg aag aca gtc 624 Arg Val Glu Ser Asp Ser Ala Ile Asn Val Met Lys Trp Lys Thr Val 40 tee acg att tte etg gtg gte gte ete tae etg ate ate gga gee geg 672 Ser Thr Ile Phe Leu Val Val Val Leu Tyr Leu Ile Ile Gly Ala Ala 720 gtg ttc aag gca ttg gag cag cct cag gag att tcc cag agg acc acc Val Phe Lys Ala Leu Glu Gln Pro Gln Glu Ile Ser Gln Arg Thr Thr 70 att gtg atc cag aag cag acc ttc ata gcc cag cat gcc tgc gtc aac 768 Ile Val Ile Gln Lys Gln Thr Phe Ile Ala Gln His Ala Cys Val Asn 90 85 tcc acc gag ctg gac gaa ctc atc cag caa ata gtg gca gca ata aac 816 Ser Thr Glu Leu Asp Glu Leu Ile Gln Gln Ile Val Ala Ala Ile Asn 105 100 gca ggg att atc ccc tta gga aac agc tcc aat caa gtt agt cac tgg 864 Ala Gly Ile Ile Pro Leu Gly Asn Ser Ser Asn Gln Val Ser His Trp 115 gac etc gga age tet tte tte ttt get ggt act gtt ate aca ace ata 912 Asp Leu Gly Ser Ser Phe Phe Phe Ala Gly Thr Val Ile Thr Thr Ile 135 130

gga ttt gga aac atc tcc cca cga act gaa ggt gga aaa ata ttc tgc



| Gly               | Phe<br>145              | Gly               | Asn               | Ile               | Ser               | Pro<br>150        | Arg               | Thr               | Glu               | Gly               | Gly<br>155        | Lys               | Ile               | Phe               | Cys               |      |
|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
| atc<br>Ile<br>160 | atc <sup>.</sup><br>Ile | tat<br>Tyr        | gcc<br>Ala        | ttg<br>Leu        | ctg<br>Leu<br>165 | gga<br>Gly        | att<br>Ile        | ccc<br>Pro        | ctc<br>Leu        | ttt<br>Phe<br>170 | ggc<br>Gly        | ttt<br>Phe        | cta<br>Leu        | ctg<br>Leu        | gct<br>Ala<br>175 | 1008 |
| Gly<br>ggg        | gtt<br>Val              | ggt<br>Gly        | gat<br>Asp        | cag<br>Gln<br>180 | cta<br>Leu        | gga<br>Gly        | act<br>Thr        | ata<br>Ile        | ttt<br>Phe<br>185 | gga<br>Gly        | aaa<br>Lys        | gga<br>Gly        | att<br>Ile        | gcc<br>Ala<br>190 | aaa<br>Lys        | 1056 |
| gtg<br>Val        | gaa<br>Glu              | gac<br>Asp        | aca<br>Thr<br>195 | ttt<br>Phe        | att<br>Ile        | aag<br>Lys        | tgg<br>Trp        | aat<br>Asn<br>200 | gtt<br>Val        | agt<br>Ser        | cag<br>Gln        | acg<br>Thr        | aag<br>Lys<br>205 | att<br>Ile        | cgt<br>Arg        | 1104 |
| atc<br>Ile        | atc<br>Ile              | tcc<br>Ser<br>210 | acc<br>Thr        | atc<br>Ile        | atc<br>Ile        | ttc<br>Phe        | atc<br>Ile<br>215 | ctg<br>Leu        | ttt<br>Phe        | ggc<br>Gly        | tgt<br>Cys        | gtc<br>Val<br>220 | ctc<br>Leu        | ttt<br>Phe        | gtg<br>Val        | 1152 |
| gct<br>Ala        | ctc<br>Leu<br>225       | cct<br>Pro        | gcg<br>Ala        | gtc<br>Val        | ata<br>Ile        | ttc<br>Phe<br>230 | aag<br>Lys        | cac<br>His        | ata<br>Ile        | gaa<br>Glu        | ggc<br>Gly<br>235 | tgg<br>Trp        | agc<br>Ser        | gcc<br>Ala        | ctg<br>Leu        | 1200 |
| gac<br>Asp<br>240 | gct<br>Ala              | atc<br>Ile        | tat<br>Tyr        | ttt<br>Phe        | gtg<br>Val<br>245 | gtt<br>Val        | atc<br>Ile        | act<br>Thr        | ctg<br>Leu        | acg<br>Thr<br>250 | acc<br>Thr        | att<br>Ile        | gga<br>Gly        | ttt<br>Phe        | gga<br>Gly<br>255 | 1248 |
| gac<br>Asp        | tac<br>Tyr              | gtg<br>Val        | gca<br>Ala        | ggt<br>Gly<br>260 | gga<br>Gly        | tca<br>Ser        | gac<br>Asp        | att<br>Ile        | gaa<br>Glu<br>265 | tat<br>Tyr        | ctg<br>Leu        | gac<br>Asp        | ttc<br>Phe        | tac<br>Tyr<br>270 | aag<br>Lys        | 1296 |
| cct<br>Pro        | gtg<br>Val              | gtg<br>Val        | tgg<br>Trp<br>275 | ttc<br>Phe        | tgg<br>Trp        | atc<br>Ile        | ctc<br>Leu        | gtt<br>Val<br>280 | Gly<br>aaa        | ctg<br>Leu        | gcc<br>Ala        | tac<br>Tyr        | ttt<br>Phe<br>285 | gca<br>Ala        | gct<br>Ala        | 1344 |
| gtt<br>Val        | ctg<br>Leu              | agc<br>Ser<br>290 | atg<br>Met        | att<br>Ile        | Gly<br>aaa        | gac<br>Asp        | tgg<br>Trp<br>295 | cta<br>Leu        | cgg<br>Arg        | gtg<br>Val        | atc<br>Ile        | tct<br>Ser<br>300 | aag<br>Lys        | aag<br>Lys        | acg<br>Thr        | 1392 |
| aag<br>Lys        | gaa<br>Glu<br>305       | gag<br>Glu        | gtg<br>Val        | gga<br>Gly        | gag<br>Glu        | ttc<br>Phe<br>310 | aga<br>Arg        | gcg<br>Ala        | cat<br>His        | gcc<br>Ala        | gct<br>Ala<br>315 | gag<br>Glu        | tgg<br>Trp        | aca<br>Thr        | gcc<br>Ala        | 1440 |
| aat<br>Asn<br>320 | gtc<br>Val              | acg<br>Thr        | gcc<br>Ala        | gag<br>Glu        | ttc<br>Phe<br>325 | aag<br>Lys        | gaa<br>Glu        | acg<br>Thr        | agg<br>Arg        | agg<br>Arg<br>330 | cgg<br>Arg        | ctg<br>Leu        | agc<br>Ser        | gtg<br>Val        | gag<br>Glu<br>335 | 1488 |
| atc<br>Ile        | tac<br>Tyr              | gac<br>Asp        | aag<br>Lys        | ttc<br>Phe<br>340 | cag<br>Gln        | cgt<br>Arg        | gcc<br>Ala        | aca<br>Thr        | tcc<br>Ser<br>345 | gtg<br>Val        | aag<br>Lys        | cgg<br>Arg        | aag<br>Lys        | ctc<br>Leu<br>350 | tcc<br>Ser        | 1536 |
| gca<br>Ala        | gag<br>Glu              | ctg<br>Leu        | gcg<br>Ala<br>355 | ggc<br>Gly        | aac<br>Asn        | cac<br>His        | aac<br>Asn        | cag<br>Gln<br>360 | gaa<br>Glu        | ctg<br>Leu        | act<br>Thr        | ccg<br>Pro        | tgt<br>Cys<br>365 | agg<br>Arg        | agg<br>Arg        | 1584 |
| acc<br>Thr        | ctg<br>Leu              | tct<br>Ser<br>370 | gtg<br>Val        | aac<br>Asn        | cac<br>His        | ctg<br>Leu        | acc<br>Thr<br>375 | agc<br>Ser        | gag<br>Glu        | agg<br>Arg        | gaa<br>Glu        | gtc<br>Val<br>380 | ctg<br>Leu        | cct<br>Pro        | ccc<br>Pro        | 1632 |
| ttg<br>Leu        | ctg<br>Leu<br>385       | Lys               | gct<br>Ala        | gag<br>Glu        | agc<br>Ser        | atc<br>Ile<br>390 | tat<br>Tyr        | ctg<br>Leu        | aac<br>Asn        | ggt<br>Gly        | ctg<br>Leu<br>395 | aca<br>Thr        | cca<br>Pro        | cac<br>His        | tgt<br>Cys        | 1680 |
| gct               | ggt                     | gag               | gac               | ata               | gct               | gtc               | att               | gag               | aac               | atg               | aag               | tag               | ccc               | tctc              | ttg               | 1729 |

Ala Gly Glu Asp Ile Ala Val Ile Glu Asn Met Lys 400 405 410

gaagagtetg aggtggagee atagggaagg gettetetag getetttgtg actgttgeeg 1789 gtagcattta aacattgtgc atggtgacct caaagggaaa gcaaatagaa aacacccatc 1849 tggtcacctt acatccaggg agggtgttgt cccgaggcgg cactctgagg atgccgtgtg 1909 ctgtccgctg agtgctgagt gatggacagg cagtgtctga tgccttttgt gcccagactg 1969 tttcccctcc ccctctctcc taacgtgcca taaggcctat gaatgaatct gaatgctttg 2029 ctggtcatgt agattggagg gatcagccct tggtttttca tggttcacct aactgagcct 2089 ggatactgac cacttaggga tgacaacatt tetttttgta aatggegaga aattettaeg 2149 cagcetttta cetaagaaat tttetgecag tgeettatet tatgaagaaa caagaceetg 2209 totggtgggc ttgtggttcc tcccttcccc gccctcaccg tgggctcacc ctttgctgac 2269 totoacotat occotocoot ocgoatacot tattgtgotg gaagcaatgt gtggottgat 2329 ggaagaaaca gatgccaact gcaggcacag aagcaacatg gaagctctgg cgtcacgggc 2389 actgcagaga agggaggtca gagaaggccc ctctgagtat ttatttgacc ggggtaccaa 2449 tggtacaget atatatatgt acagagtaat aatteecagg eeggtaacet tggetgette 2509 cacacggccc ccttttttcc ctggcagtat ttgaagttta tcatttatta ataactagtc 2569 atttttaaag gcagaagaag acatgagcac atacatctgt aatctacgtg atgtgataag 2629 aaaactgttc agactggtat tgcaaggtga tctcagacag tcgatatgga ttcattctga 2689 tgagaagaaa acagcgagac cacgtgtcgt gcgcatgagc tcatacaggg ctcactgtca 2749 gcttggacca gcccgtgagg tacagcaggc ttacacactt tcttttctta agtggttctt 2809 gccaaactgg agggagggc gatgcccttc agaagggggc acagccccag ccagcccagg 2869 gtccctctgt ggtcatgact gggtgtgagc acagatgctg gccttgggat cactgtgagt 2929 tttgcacatg gagagataca gactgctggc ataggtcgtc tctaacagta gagaaaacgc 2989 cgattagcac aatctaaatc ccccgagtag ctttttgttt aggataagag aaggctggta 3049 attcacttaa tttaaattta tatcctataa ttctttttgg atgtttcaag attcagaaaa 3109 agtocagtoc otgoatotag caaacogoog cootttooto tgtgccogta ottacatota 3169 ctgaacactg tatatgtaat ttttaaattt ttaaagcgca gaaggaaaat gattcttcta 3229 catgtaatcg caaaactgat ttctcccttc tgggggaggc ttgggcttac gtgatcatgt 3289 ggcattcaga gtaaagtctt aagacataaa cccaggatgt ttaaaaacac aaaaagattc 3349 ctattttcca aaatttgaat ttaagctata aatgtaaata tatccagttc gcttgcagag 3409 agtactttta taaacctatg aagattctaa ccaaaatttt aaaatgtcgg gttcctttac 3469 aaagaaagct ccacccatct cctgaatagc cgttttggaa gctgacatgg tgggatgtac 3529 cacgtataaa ctgtgaactg gaggacaaat aaagtttgta attaaaaaaa a 3580

| <210 | )> .4 |       |       |     |     |     |     |     |     |     |     |     |     |     |     |
|------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <211 | .> 41 | 1     |       |     |     |     |     |     |     |     |     | ·   |     |     |     |
| <212 | 2> PF | RΤ    |       |     |     |     |     |     |     |     |     |     |     |     |     |
| <213 | 3> Mi | ıs mu | ıscul | us  |     |     |     |     |     |     |     |     |     |     |     |
| <400 | )> 4  |       | -     |     |     |     |     |     |     |     |     |     |     |     |     |
| Met  | Ala   | Ala   | Pro   | Asp | Leu | Leu | Asp | Pro | Lys | Ser | Ala | Ala | Gln | Asn | Ser |
| 1    |       |       |       | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys  | Pro   | Arg   | Leu   | Ser | Phe | Ser | Ser | Lys | Pro | Thr | Val | Leu | Ala | Ser | Arg |
|      |       |       | 20    |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val  | Glu   | Ser   | Asp   | Ser | Ala | Ile | Asn | Val | Met | Lys | Trp | Lys | Thr | Val | Ser |
|      |       | 35    |       |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr  | Ile   | Phe   | Leu   | Val | Val | Val | Leu | Tyr | Leu | Ile | Ile | Gly | Ala | Ala | Val |
|      | 50    |       |       |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe  | Lys   | Ala   | Leu   | Glu | Gln | Pro | Gln | Glu | Ile | Ser | Gln | Arg | Thr | Thr | Ile |
| 65   |       |       |       |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Val  | Ile   | Gln   | Lys   | Gln | Thr | Phe | Ile | Ala | Gln | His | Ala | Cys | Val | Asn | Ser |
|      |       |       |       | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr  | Glu   | Leu   | Asp   | Glu | Leu | Ile | Gln | Gln | Ile | Val | Ala | Ala | Ile | Asn | Ala |
|      |       |       | 100   |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly  | Ile   | Ile   | Pro   | Leu | Gly | Asn | Ser | Ser | Asn | Gln | Val | Ser | His | Trp | Asp |
|      |       | 115   |       |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu  | Gly   | Ser   | Ser   | Phe | Phe | Phe | Ala | Gly | Thr | Val | Ile | Thr | Thr | Ile | Gly |
|      | 130   |       |       |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Phe  | Gly   | Asn   | Ile   | Ser | Pro | Arg | Thr | Glu | Gly | Gly | Lys | Ile | Phe | Cys | Ile |
| 145  |       |       |       |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ile  | Tyr   | Ala   | Leu   | Leu | Gly | Ile | Pro | Leu | Phe | Gly | Phe | Leu | Leu | Ala | Gly |
|      |       |       |       | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Val  | Gly   | Asp   | Gln   | Leu | Gly | Thr | Ile | Phe | Gly | Lys | Gly | Ile | Ala | Lys | Val |
|      |       |       | 180   |     |     |     |     | 185 | •   |     |     |     | 190 |     |     |
| Glu  | Asp   | Thr   | Phe   | Ile | Lys | Trp | Asn | Val | Ser | Gln | Thr | Lys | Ile | Arg | Ile |
|      |       | 195   |       |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

Ile Ser Thr Ile Ile Phe Ile Leu Phe Gly Cys Val Leu Phe Val Ala

|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Pro | Ala | Val | Ile | Phe | Lys | His | Ile | Glu | Gly | Trp | Ser | Ala | Leu | Asp |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ala | Ile | Tyr | Phe | Val | Val | Ile | Thr | Leu | Thr | Thr | Ile | Gly | Phe | Gly | Asp |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Tyr | Val | Ala | Gly | Gly | Ser | Asp | Ile | Glu | Tyr | Leu | Asp | Phe | Tyr | Lys | Pro |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Val | Val | Trp | Phe | Trp | Ile | Leu | Val | Gly | Leu | Ala | Tyr | Phe | Ala | Ala | Val |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Leu | Ser | Met | Ile | Gly | Asp | Trp | Leu | Arg | Val | Ile | Ser | Lys | Lys | Thr | Lys |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Glu | Glu | Val | Gly | Glu | Phe | Arg | Ala | His | Ala | Ala | Glu | Trp | Thr | Ala | Asn |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Val | Thr | Ala | Glu | Phe | Lys | Glu | Thr | Arg | Arg | Arg | Leu | Ser | Val | Glu | Ile |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Tyr | Asp | Lys | Phe | Gln | Arg | Ala | Thr | Ser | Val | Lys | Arg | Lys | Leu | Ser | Ala |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Glu | Leu | Ala | Gly | Asn | His | Asn | Gln | Glu | Leu | Thr | Pro | Cys | Arg | Arg | Thr |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Leu | Ser | Val | Asn | His | Leu | Thr | Ser | Glu | Arg | Glu | Val | Leu | Pro | Pro | Leu |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Leu | Lys | Ala | Glu | Ser | Ile | Tyr | Leu | Asn | Gly | Leu | Thr | Pro | His | Cys | Ala |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Gly | Glu | Asp | Ile | Ala | Val | Ile | Glu | Asn | Met | Lys |     |     |     |     |     |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     |     |     |

<210> 5

<211> 394

<212> PRT

<213> Mus sp.

<223> TASK

<400> 5

| Met | Lys | Arg | Gln | Asn | Val | Arg | Thr | Leu  | Ala | Leu  | Ile | Val | Cys | Thr | Phe |
|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|-----|-----|-----|-----|
| 1   |     |     |     | 5   |     |     |     |      | 10  |      |     |     |     | 15  |     |
| Thr | Tyr | Leu | Leu | Val | Gly | Ala | Ala | Val  | Phe | Asp. | Ala | Leu | Glu | Ser | Glu |
|     |     |     | 20  |     |     |     |     | 25   |     |      |     |     | 30  |     |     |
| Pro | Glu | Leu | Ile | Glu | Arg | Gln | Arg | Leu  | Glu | Leu  | Arg | Gln | Gln | Glu | Leu |
|     |     | 35  |     |     |     |     | 40  |      |     |      |     | 45  |     |     |     |
| Arg | Ala | Arg | Tyr | Asn | Leu | Ser | Gln | Gly  | Gly | Tyr  | Glu | Glu | Leu | Glu | Arg |
|     | 50  |     |     |     |     | 55  |     |      |     |      | 60  |     |     |     |     |
| Val | Val | Leu | Arg | Leu | Lys | Pro | His | Lys  | Ala | Gly  | Val | Gln | Trp | Arg | Phe |
| 65  |     |     |     |     | 70  |     |     |      |     | 75   |     |     |     |     | 80  |
| Ala | Gly | Ser | Phe | Tyr | Phe | Ala | Ile | Thr  | Val | Ile  | Thr | Thr | Ile | Gly | Tyr |
|     |     |     |     | 85  |     |     |     |      | 90  |      |     |     |     | 95  |     |
| Gly | His | Ala | Ala | Pro | Ser | Thr | Asp | Gly  | Gly | Lys  | Val | Phe | Cys | Met | Phe |
|     |     |     | 100 |     |     |     |     | 105  |     |      |     |     | 110 |     |     |
| Tyr | Ala | Leu | Leu | Gly | Ile | Pro | Leu | Thr  | Leu | Val  | Met | Phe | Gln | Ser | Leu |
|     |     | 115 |     |     |     |     | 120 |      |     |      |     | 125 |     |     |     |
| Gly | Glu | Arg | Ile | Asn | Thr | Leu | Val | Arg  | Tyr | Leu  | Leu | His | Arg | Ala | Lys |
|     | 130 |     |     |     |     | 135 |     |      |     |      | 140 |     |     |     |     |
| Lys | Gly | Leu | Gly | Met | Arg | Arg | Ala | Asp  | Val | Ser  | Met | Ala | Asn | Met | Val |
| 145 |     |     |     |     | 150 |     |     |      |     | 155  |     |     |     |     | 160 |
| Leu | Ile | Gly | Phe | Phe | Ser | Cys | Ile | Ser  | Thr | Leu  | Cys | Ile | Gly | Ala | Ala |
|     |     |     |     | 165 |     |     |     |      | 170 |      |     |     |     | 175 |     |
| Ala | Phe | Ser | His | Tyr | Glu | His | Trp | Thr  | Phe | Phe  | Gln | Ala | Tyr | Tyr | Tyr |
|     |     |     | 180 |     |     |     |     | 185  |     |      |     |     | 190 |     |     |
| Cys | Phe | Ile | Thr | Leu | Thr | Thr | Ile | Gly  | Phe | Gly  | Asp | Tyr | Val | Ala | Leu |
|     |     | 195 |     |     |     |     | 200 |      |     |      |     | 205 |     | •   |     |
| Gln | Lys | Asp | Gln | Ala | Leu | Gln | Thr | Gln  | Pro | Gln  | Tyr | Val | Ala | Phe | Ser |
|     | 210 |     |     |     |     | 215 |     |      |     |      | 220 |     |     |     |     |
| Phe | Val | Tyr | Ile | Leu | Thr | Gly | Leu | Thr. | Val | Ile  | Gly | Ala | Phe | Leu | Asn |
| 225 |     |     |     |     | 230 |     |     |      |     | 235  |     |     |     |     | 240 |
| Leu | Val | Val | Leu | Arg | Phe | Met | Thr | Met  | Asn | Ala  | Glu | Asp | Glu | Lys | Arg |

| Asp | Ala | Glu | His | Arg | Ala | Leu | Leu | Thr | Arg | Asn | Gly | Gln | Ala | Gly | Gly |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Gly | Gly | Gly | Gly | Gly | Ser | Ala | His | Thr | Thr | Asp | Thr | Ala | Ser | Ser | Thr |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ala | Ala | Ala | Gly | Gly | Gly | Gly | Phe | Arg | Asn | Val | Tyr | Ala | Glu | Val | Leu |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| His | Phe | Gln | Ser | Met | Cys | Ser | Cys | Leu | Trp | Tyr | Lys | Ser | Arg | Glu | Lys |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Leu | Gln | Tyr | Ser | Ile | Pro | Met | Ile | Ile | Pro | Arg | Asp | Leu | Ser | Thr | Ser |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Asp | Thr | Cys | Val | Glu | Gln | Ser | His | Ser | Ser | Pro | Gly | Gly | Gly | Gly | Arg |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Tyr | Ser | Asp | Thr | Pro | Ser | Arg | Arg | Cys | Leu | Cys | Ser | Gly | Ala | Pro | Arg |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Ser | Ala | Ile | Ser | Ser | Val | Ser | Thr | Gly | Leu | His | Ser | Leu | Ser | Thr | Phe |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Arg | Gly | Leu | Met | Lys | Arg | Arg | Ser | Ser | Val |     |     |     |     |     |     |
| 385 |     |     |     |     | 390 |     |     |     |     |     |     |     |     | •   |     |